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## FORTIFIED MANOR OF BALANDY IN THE REGION OF EASTERN ARAL SEA

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### Abstract

The publication "Fortified manor of Balandy in the region of eastern Aral Sea" presents the results of one of the most striking monuments, that was a part of the small fortified settlements and big ancient settlements in a large number of unwallled villages. Fortified homestead Balandy, attributed by researchers to chirikrabatsk culture of III-II centuries BC, was the center of a small agricultural oasis, which was based on the trunk of one of the latitude channels of the ancient riverbed Syrdarya.

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### 1.Introduction

The fortified manor of Balandy is the center of a small agricultural oasis which was based on the main channel, taken away from one of the latitude canals of the Inkardariya River (Andrianov B.V. 1969.).

The rectangular monument with dimensions of 80 x 130 m was surrounded with a defensive wall and focused by corners to the sides of the world. The settlement is situated in the Natural Boundary of Balandy was open by the archaeological group of the Khorezm Archeology-topographical Expedition in 1959. The archaeological researches were conducted here in 1960-61-th of 20-th century. The main object for researchers was the dome mausoleum of Balandy 2 which was completely excavated. The recognized excavations were carried out on the fortified manor of Balandy 1. As a result of these works some rooms of the building of the monument located in the northwestern part partially were opened. Some valuable finds were made during the excavation. Among them it is necessary to mention the carved bone plates, graceful bronze hand-made articles in the form of leaves of antique shape, fragments of glass vessels of the Syrian production decorated with painting, a stone figure of a fantastic animal. On the walls of the rooms plaster traces with a polychromic painting were recorded. On the basis of the obtained data was made the conclusion that Balandy 1 is a big strengthened house in which housing estate some smart rooms were dug out. By the archaeological materials the monument was dated the 3-2 centuries BC (Tolstov S.P. 1962.).

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The settlement was surveyed by the route group of Chirik-Rabat Archaeological Expedition repeatedly. The area of the site inside the fortifications represents a flat takyr platform without any signs in the relief. This circumstance testifies that occupation layers and the constructions relating to the period of life of a monument were blocked by the powerful layers of loamy flows and a destructive brick blockage, as was established during the excavation (Kurmankulov ZH., Utubayev ZH. 2008.).



• Fig. 1. The fortified manor of Balandy

Two excavations were put here for the purpose of clarification of a stratigraphical situation and identification of plans within defensive walls: in the southeastern (R-1) and in the southwestern (R-2) parts of a monument. The task to define the character of the defensive constructions of the Balandy 1 was in passing set, for this purpose on an excavation 2 where the fortification was mostly destroyed cleaning of edge of a break of a fortification is carried out and the section of occupation layers to the continent was made.

## 2.The excavation 1

has the area of 48 sq.m (6 x 8 m) was established in the eastern corner of the monument. Originally the whole of the area of the excavation was divided into squares 4 x 4 m within which the layer takyr no more than 20 sm thickness was removed. Below there is a layer of the dense clay sandy flows the capacity of which sharply increases from fortifications to the center of the monument. In the northern part of the excavation the thickness of this layer is 60 sm. It was found on the internal face and a site of the area of the estate adjoining walls from the West and the Northwest during the excavation of the defensive wall. On the separate sites of the excavation, on some distance from the external walls, this layer in the top part turns into the layer of a destructive blockage – amorphous fragments of a brick in layer sandy flows. Probably they were any falls of a relief where was water for a long time. On the separate sites thickness of a layer of a destructive blockage reaches 40 sm. Under blockage layers, in excavation brows, separate lenses layered sandy flows of a thickness 70-80 sm are accurately fixed, which maximum thickness was a little more than 20 sm. Below the layer of a blockage and sandy flows which, certainly, treats the period of final destruction of a monument, there is a layer of dense dust-like sandy loam of grey color, probably of an eluvia origin. Its thickness obviously increases from the fortifications to the central part of the building and hesitates from 15-20 to 60 sm. Probably this layer belongs to the period when the monument was left by inhabitants forever, but the walls still stood. The certificate to that is the fact that exactly this layer blocks all construction designs and the occupation layers relating to the period of functioning of the fortified manor.

The adobe bricks walls of the buildings which could be connected with the inhabited constructions, in the square of an excavation were not revealed. At the same time during the excavation works it was succeeded to reconstruct partially quite difficult history of the construction of defensive buildings of the Balandy in this part of the monument.

It is possible to allocate, at least, two main periods of the construction of the defensive wall which, in their turn, are subdivided into stages. The earliest (the 1-st stage, the 1-st period) is a wall not less than two meters wide constructed of a layered lumped pakhsa that have a grayish-brown color. It was a southwestern defensive wall of the monument at the first stage of its existence. In this wall, at the distance of 1,4 m from the eastern corner of a wall of the II period the pass of 0,8 m wide removing out of limits of the estate was found. It is possible to assume that it was so-called "gate"; the constructive element which quite often meets in the fortification systems of the Early Antique Khorasm (Kurgashin-kala, Kyrk-molla in Kunya-Urgench). It is considered that such "gates" were used for sorties of a landing defending or for imperceptible withdrawal of the population from the fortress.

From the inner part of a pakhsa wall, just as the pass walls were plastered. On the separate sites the layer of saman plaster reaches 5-7 sm. Most likely, after a while a stilobate of 1,8-1,82 m wide and 0,8 m high, put of dense lumped clay of grey-brown color was attached to an early wall from the inside. Its construction can be dated to the 2-nd stage of the 1-st period. Actually that the bottom level of pass coincides with the top level of the stilobate, the following fact attracts attention. It is quite logical to assume that pass in an external wall was arranged at the same time with construction of the stilobate. So it can be assumed that the raise of the external wall and the stilobate were the united project and were made if not at the same time, but with a very small break. Thus, during the first period the external defensive wall in the lower part was not less than 4 m wide. Actually the stilobate can be treated as a shooting platform.

The occupation layers relating to the first period of life of the site were recorded in the central and northwestern parts of the excavation. In the central part the part of the land easy dwelling oval or sub rectangular in the plan were excavated. The width of the dug-out southeastern part is 3,15 m. Most likely, it was a chief construction a little buried in soil, it can be an awning. On a board of a dugout the chief poles are revealed; two of them, oval in the plan, in the northeastern part of the dwelling, one, roundish with a diameter of 14 sm, - in the southern part. The depth of the poles is no more than 20 sm. They are filled with a friable dust-like sandy loam. Depth of a semi-dugout was not less than 50 sm. Its board is accurately traced in the northwestern edge of the excavation. Probably, the dwelling functioned throughout the whole 1st period, but was constructed not earlier than the construction of the stilobate, as its southeastern board completely repeats the line of its internal wall.

Two inhabited levels in the form of well trampled down surface were recorded here. The bottom level of the floor of the dwelling was recorded on the mark-363 from the bench mark point. Directly at this level the layer of friable lumped sandy loam of grey-brownish color with a small amount of ceramics and bones of animals lies. The maximum capacity of this layer is 32-34 sm, it is recorded in the central part of the dugout. The top level of the floor is recorded 32-34 sm above, respectively on marks - 331-329 from the bench mark point. At the top level there is the occupation layer in the form of lumped sandy loam of dark grey color with the high content of ashes. The maximum power of this layer is 40 sm. In the southwestern edge of the excavation, in the same layer, 20 sm above the level of the top floor there is probably a hearth in the form of a lens of the clay 10-14 sm thickness made from red-hot and a small ash pit on this layer. Lens width on the level of the edge is of 88 sm. Slightly above the center there is the 14-20 sm cindery layer which is traced on the whole area of a semi-dugout. The cindery layer, in its turn, is blocked by a layer of dense sandy loam of grey color. The fragment of a bronze vessel was found in this layer – a hemispherical bowl with upper edge sharply unbent outside. The diameter of the mouth is 19 sm. On morphological signs it is close to ceramic bowls due to figurative nimbuses which can be met everywhere in the southern areas among ceramics of the Hellenistic time of the 3-2 centuries BC.

Probably the numerous holes with a diameter of 0,7-1,2 m which have been cut down in a brick facing and clay stilobate belong to the final stage of life of the existence of the construction. Practically all the holes were filled with dust-like sandy loam of grayish color, without any finds. It is very probable that these holes were grains at the last stage of the existence of the estate.

### **3.Excavation 2.**

The excavation with the square of 4x4 sq.m was put at the northwestern wall, in that place where the defensive wall remained on the maximum height. The stratigraphic situation here differs little from that was received on the excavation 1. Under the thin layer of the flows - a friable sandy loam of grey-brownish color - there is a layer of a brick blockage with the height from 20 to 50 sm. It blocks a quite powerful layer of flows – its thickness is up to 50 sm, below which there is an occupation layer of the 2-nd period of the monument – a lumped sandy loam of dark grayish color with a small amount of ceramics and bones of animals.

The leg of a bronze glass was found in this layer, its height is of 10,2 sm, diameter of the basis is 7,4 sm. As it is possible to assume a vessel consisted of two parts which were made separately: the tank which didn't remain and a high truncated conic leg. Its lower part was closed. For this purpose precisely on diameter of the lower part, the bronze plate which was fixed to walls by means of a continuous bronze holder rim was made. On morphological signs the vessel finds perfect analogies among a ceramic material of the first half of the 2 century BC in the southern areas of Central Asia (Sogd, Bactria). Below the inhabited level of the second period there is the layer of dense loam of grey color, probably the pressed clay under which the inhabited level of the 1st period of the existence of the monument, lying directly on the continent is recorded. The continent in the form of the dense layered loam of grey-brownish color is recorded on a mark – 3, 45 from the bench mark point.

Two periods of construction of defensive walls were revealed on the excavation 2, as well as on the excavation 1. For the purpose of specification of the received periodization the cleaning of the destroyed part of the defensive wall in the southern part of an excavation was carried out. The received materials as a whole confirmed the data obtained on the excavation 1.

The wall belongs to the earliest stage of construction - stilobate 1,5 m wide and height is 0,7m. Most likely originally, at the level of the zero occupation the pakhsa monolith 1 m wide, then the stilobate were constructed here, then the width was a little increased; at the distance of 20-25 sm from the internal side of a pakhsa wall one more pakhsa wall 38-40 sm wide was constructed in the lower part. It had the form of a triangle in the section. The space between these two walls was filled with the dense lumped clay. Thus, the general width of the stilobate reaches 1,6 m. To the external side of the stilobate the external defensive wall of the 1st period adjoins. It was constructed on the basis of alternating layers of the lumped loam and dense lumped clay of a grey and yellow color. The thickness of these layers is 20-35 sm. The pakhsa blocks from 50 sm to 1 m wide rectangular or trapezoid in section were put on the formed stilobate. The general height of the early wall is 1,7 m. Thus width of the early wall in the lower part reaches 3,4 m. The basis of the both walls are at one level on the continent which is recorded here on the mark – 3,01 from the bench mark point. Probably walls were put up at the same time or with a small break. Thus, the early wall of Balandy was stepped.

Some period later there is a layer of dense lumped clay above the stilobate wall to the level of the top of the external wall. Then the whole monolith of early walls is faced by the blocks of pakhsa of a high quality, the width of the block is 1-0,8 m, height 0,4 - 0,5m. Thus, the basis for the brick wall is 8 m of wide was formed. On the external part of this basis the brick wall of 1,2 m wide is constructed, in the basis of which the loopholes were arranged. During the excavation works it was succeeded to clear away two of them. The loopholes had an arrow-shaped form with the height of 55-60 sm, the maximum width of 34 cm, and width of a bed of 20 sm. Thus the general height of the remained external wall makes 3,34 m.

The remains of dwellings in the excavation 2 are not revealed yet, however the traces of an habitation of this site of the estate both in the first, and during the second period were recorded. The hearth arranged on the top surface of the stilobate wall belongs to the second period. The floor hearth was made of the fragments of raw bricks put on an edge and had a rectangular shape. The sizes are 55 x 37 sm, to the East from it, at the level of the pressed clay one more floor hearth in the form of small oval deepening filled with ashes and pieces of the burned clay with a diameter of 40-55 cm was cleared away. Probably the brick step eminence belongs to the 1-st period of an habitation of the monument at a stilobate wall. It was rectangular in the plan and the maximum height of it was 24-25 sm. It is very tempting to assume that they were steps to the platform at the external wall.

Two periods of construction of fortification constructions of the manor of Balandy 1 thus on the excavation 2, were also revealed; the 1-st period – the pakhsa wall of a quite low quality with the stilobat and a shooting platform inside, and the 2-nd period – a brick external wall with arrow-shaped loopholes on the powerful pakhsa basis. The wall of the second period also had a shooting platform, but firing was conducted through loopholes.

#### 4. Conclusions



As a result of excavation not numerous ceramic complex, no more than 200 fragments of ceramics, a little more than 50 profile parts of vessels were received. In a complex considerably (67% from total) prevail the modelled closed forms (pots, vessels without handles) made of clay with plentiful impurity of chamotte, and the burned-through plaster. The potter's ceramics isn't numerous. Almost all the vessels find analogies in a ceramic complex of Chirik-Rabat culture. Among other it is possible to note some fragments of large vessels with the accurately expressed strut of walls in benthonic part that is characteristic for ceramics of the 6-4 centuries BC (a so-called "Akhaemenid" Archaeological Complex).

The excavations on the Balandy settlement just have began, however after the first short field season it is possible to draw some preliminary conclusions. Materials that were received during the excavation give the reason to age the bottom date of the existence of the settlement. The existence of the rectangular adobe brick relating to the 2-nd period of the existence of the monument, and ceramic forms with a strut in benthonic part (the vessels like originates from Yaz of 2-3) allow dating the time of its construction no later than the middle – the end of the 4 century BC. Already since the beginning of the 3 century AD in the whole territory of Central Asia the square format of the adobe brick dominates undividedly. In Khoresm the square adobe brick appears already at the end of the 5 - the beginning of the 4 centuries BC. Cylindrical forms of vessels didn't meet any more in the 3 century. In addition the long history of the construction of defensive buildings testifies to the early date of the emergence of the settlement. Attracts attention the fact that the walls of the 1-st period were under construction from pakhsa of a very poor quality that, probably testifies that builders had very approximate idea of construction of the equipment. Only the walls of the second period were put up with some observance of canons of serf architecture, first of all the Khorezm – adobe brick walls based on the pakhsa basis, that had an arrow-shaped loopholes.

At last, the assumption that Balandy 1 was the big strengthened house wasn't confirmed. In any case, any premises or capital constructions from adobe brick in the southwestern and southeastern parts of the monument weren't revealed. Probably, it was a well strengthened estate with an extensive yard. The central building settled down in the northwestern part, and was mentioned by the excavation of the beginning of the 60-th of the last century. This manor, certainly, was the center for the dispersed settlement, the place of the residence of a rural community. This manor could carry out functions of the communal storage and, if necessary, shelter fortress. It is necessary to notice that the similar structure of the settlement finds the direct parallels in the Early Antique Khoresm where the small not fortified manors that were grouped around to the fortress serving at the same time both public storage and a - a shelter (the Kurgashin settlement, the Ayazkaly settlement) (Kurmankulov ZH., Utubaev ZH. 2009).

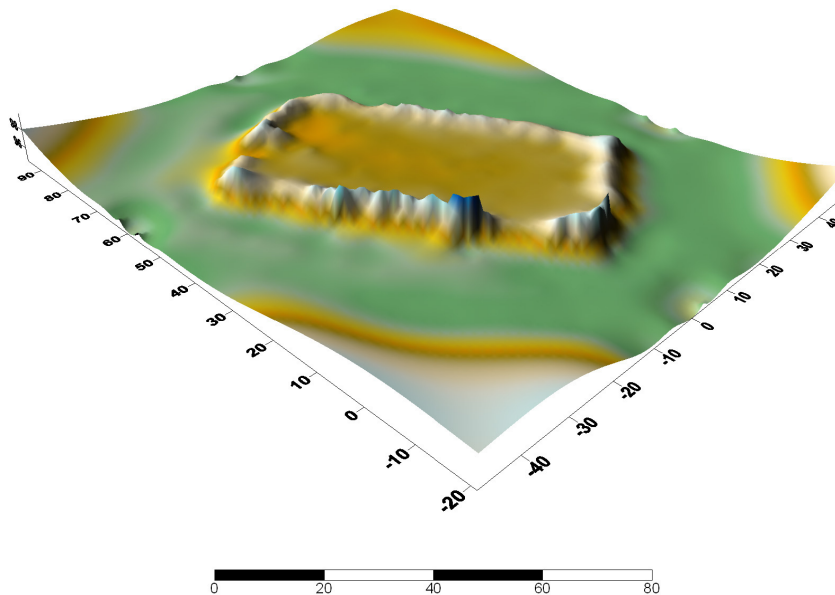


Figure 2

**References**

- Andrianov B.V. Ancient irrigation Aral Sea., M. 1969. p.200
- Tolstov S.P. According to ancient deltas Oxus and Jaxartes. M. 1962. pp. 172-174
- Kurmankulov ZH., Bollelov S., Utubayev ZH, Darmanov R., Torezhanova N. Studies fortified manor Balandy 1 in 2007 // Report on archaeological investigations of the State program "Cultural Heritage" in 2007, A. 2008. pp. 71-73
- Kurmankulov ZH., Bollelov S., Zhetibaev ZH., Utubaev ZH. On archaeological investigations on the site of Balanda in 2007-2008. Materials of the international scientific and practical conference "Contribution of scientists of KNU named by al-Farabi in the implementation realization of the program" Cultural heritage achievement and perspective of development" February 27, 2009 A. 2009. pp. 35-38.